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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,868	08/22/2003	Mats Andersson	07589.0015.PCUS01	1867

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EXAMINER
STEIN, JULIE E

ART UNIT	PAPER NUMBER
2685	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,868	ANDERSSON ET AL.	
	Examiner	Art Unit	
	Julie E. Stein, Esq.	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8-22-03, 8-27-03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,742,915 to Stafford.

Stafford discloses all the steps of independent claim 1, including a method for optimizing the efficiency of base-to-vehicle communication (column 2, lines 25 to 32), said method comprising the steps of, beginning a call initiation step fro establishing a wireless communication between a base station and a remotely located vehicle (column 4, line 15 to column 5, line 33 and Figure 2), sensing conditions at which a prospective wireless communication would be conducted (column 4, lines 15 to 18 and column 4, lines 64 to column 5, line 20), analyzing whether the sensed conditions meet predetermined criteria for initiation of the prospective wireless communication (Id.), and choosing to initiate a wireless communication when the predetermined criteria for initiation of the prospective wireless communication is satisfied based on the analysis of sensed conditions (Id. a level 2 or 3 event).

Stafford also discloses all the steps of independent claim 14, including a method for optimizing the efficiency of base-to-vehicle communication (column 2, lines 25 to 32), said method comprising the steps of, beginning an initiation step for establishing a

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wireless communication between a base station and a remotely located vehicle (column 4, line 15 to column 5, line 33 and Figure 2), sensing conditions at which a prospective wireless communication would be conducted (column 4 lines 15 to 18), analyzing whether the sensed conditions meet predetermined criteria for initiation of the prospective wireless communication (column 4, lines 19 to 62), and choosing to abort initiation of the prospective wireless communication when the predetermined criteria for initiation of the prospective wireless communication fail to be satisfied based on the analysis of sensed conditions (no event or a level 1 event).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 8-9, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stafford in view of U.S. Patent No. 6,008,740 to Hopkins.

Stafford teaches all the steps of dependent claims 2-3, 8-9, and 16-17, except determining from the sensed conditions that the remotely located vehicle is traveling below a predetermined threshold speed (claim 2) or above a predetermined threshold speed (claim 16), indicative of highway travel (claims 3 and 16), or urban travel (claim 8), or traveling in an urban environment (claims 9 and 17).

However, Stafford teaches that any number and type of sensors may be used, including brake sensors and the like. See column 2, lines 32 to 42. In addition Hopkins

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teaches a speed limit notification system in which a speedometer is used to determine the speed of a vehicle including a mobile receiver, and that urban area speed limits are defined as 45 mph or lower and rural/highway areas are defined as over 45 mph. See abstract, column 3, lines 41 to 47, and column 4, lines 20 to 30. Hopkins also teaches the use of the defined speed limits in combination with time limits to determine if a given stored speed limit is applicable. See column 4, lines 20 to 35.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to understand that one of the sensors included in Hopkins would be a speed sensor (such as a speedometer) and that the measured speed could be used as a parameter to compare to a predetermined threshold in order to determine that the vehicle was traveling below a given speed. *Id.* Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that slower speeds (below 45 mph) would indicate an urban environment and higher speeds (above 45 mph) would indicate a highway as taught by Hopkins. *Id.*

5. Claims 4-7, 10-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stafford in view of U.S. Patent Application No. 2001/0009855 to I'Anson.

Stafford teaches all the steps of dependent claim 4, except determining from the sensed conditions transmission quality for the prospective wireless communication. However, Stafford teaches that any number and type of sensors may be used (column 2, lines 32 to 42) and that long range RF technologies are well known in the art (column 4, lines 5 to 10). I'Anson teaches that it is well known in the art to take into

consideration the quality of service (QoS) when making a wireless call. See paragraph 10. In addition, l'Anson teaches a method of scheduling data transfer requests based in part on QoS. See paragraph 30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to understand that one consideration when optimizing the efficiency of the claimed communication is the QoS available. See paragraph 10.

Stafford in view of l'Anson further teach all the steps of dependent claims 5-7, including sending variable, abbreviate, or complete amounts of electronic data from the remotely located vehicle to the base station based on the determined transmission quality for the prospective wireless communication being above a threshold quality. See l'Anson, paragraph 31, which teaches that the frequency of the transfer may be once or repeated and that the data content may vary between transfers.

Stafford teaches all the steps of dependent claim 10, except completing the prospective wireless communication when a calculated cost of the prospective wireless communication meets predetermined parameters. However, l'Anson teaches a method of scheduling data transfer requests based on cost. See paragraphs 13 to 20. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use cost as a parameter in determining whether to complete the wireless communication in Stafford because the lower the cost the better for the user.

Stafford in view of l'Anson further teach all the steps of dependent claims 12-13, including sending variable, abbreviate, or complete amounts of electronic data from the remotely located vehicle to the base station based on the calculated cost of the

prospective wireless communication. See l'Anson, paragraph 31, which teaches that the frequency of the transfer may be once or repeated and that the data content may vary between transfers.

The rejection of claims 10-13 are hereby incorporated. Stafford in view of l'Anson also teach all the steps of dependent claim 15, including aborting initiation of the prospective wireless communication when a calculated cost of the prospected wireless communication exceeds a threshold. See, l'Anson paragraphs 13 to 20.

6. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stafford in view of U.S. Patent Application No. 2003/0017842 to Moles et al.

The rejection of claims 1 and 14 are hereby incorporated. Stafford teaches all the steps of independent claims 18 and 19, including a method for optimizing the efficiency of base-to-vehicle communication, said method comprising the steps of, beginning a call initiation step for establishing a wireless communication between a base station and a remotely located vehicle. See above. However, Stafford does not explicitly teach sensing the identity of the local provider of wireless communication services to the remotely located vehicle, determining whether that local provider is an approved provider, and choosing to initiate/abort initiation of a wireless communication when the identified provider is approved to provide wireless communications between the base station and the remotely located vehicle. However, Moles teaches that it is well known in the art that a wireless device will attempt to access a preferred provider or system. See paragraph 7. In addition, Moles teaches that if the most preferred provider is not available, then the mobile device will attempt to access the next preferred

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provider on a preference list maintained within the mobile device until the mobile device either finds an acceptable provider or the list is exhausted and no communication can be initiated. *Id.* Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to understand that the mobile device located in the vehicle would include a preferred provider list and that wireless communication between the vehicle and the base would initiate only if the provider was a preferred provider as taught by Moles.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie E. Stein, Esq. whose telephone number is (571) 272-7897. The examiner can normally be reached on M-F (8:30 am-5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen Vo
4-28-2005

NGUYEN T. VO
PRIMARY EXAMINER